

## USDA National Nutrient Database for Standard Reference Release 28

Statistics Report 02033, Spices, poppy seed <sup>a</sup>

Report Date: October 27, 2015 05:54 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<b>Proximates</b>													
Water <sup>1 3 4</sup>	g	5.95	--	1.057	3.39	7.2	2.0	1.402	10.497	3	Analytical or derived from analytical	--	06/2008
Energy	kcal	525	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Energy	kJ	2196	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Aggregated data involving comb. of codes other than 1,12 or 6													
Protein <sup>1 2</sup>	g	17.99	--	--	17.57	18.4	1.0	--	--	2	involving comb. of codes other than 1,12 or 6	--	06/2008
Total lipid (fat) <sup>1 2 3</sup>	g	41.56	--	1.560	36.58	45.52	2.0	34.85	48.272	3	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Ash <sup>1 3</sup>	g	6.37	--	0.687	4.92	7.06	1.0	-2.35	15.097	2	Analytical or derived from analytical	--	06/2008
Carbohydrate, by difference	g	28.13	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Fiber, total dietary <sup>2</sup>	g	19.5	--	--	--	--	--	--	--	--	Calculated by manufacturer, not adjusted or rounded for NLEA	--	06/2008
Sugars, total <sup>1</sup>	g	2.99	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008

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Sucrose <sup>1</sup>	g	2.33	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Glucose (dextrose) <sup>1</sup>	g	0.37	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Fructose <sup>1</sup>	g	0.29	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Lactose <sup>1</sup>	g	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Maltose <sup>1</sup>	g	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Galactose <sup>1</sup>	g	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
<b>Minerals</b>													
Calcium, Ca <sup>1 2 5</sup>	mg	1438	--	69.425	1,320	1,560	2.0	1139.476	1736.902	3	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Iron, Fe <sup>1 2 3 5 6</sup>	mg	9.76	--	0.918	6.41	12.5	4.0	7.213	12.309	5	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Magnesium, Mg <sup>1 3</sup>	mg	347	--	11.662	333	387	1.0	198.481	494.844	2	Analytical or derived from analytical	--	06/2008
Phosphorus, P <sup>1 3 5</sup>	mg	870	--	78.286	788	1,277	2.0	532.677	1206.35	3	Analytical or derived from analytical	--	06/2008
Potassium, K <sup>1 3 5</sup>	mg	719	--	44.260	601	1,054	2.0	528.708	909.58	3	Analytical or derived from analytical	--	06/2008

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Sodium, Na <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>	mg	26	--	13.811	8	54	2.0	-33.251	85.6	3	Aggregated data involving comb. of codes other than 1,12 or6	--	06/2008
Zinc, Zn <a href="#">1</a>	mg	7.90	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Copper, Cu <a href="#">1</a> <a href="#">3</a> <a href="#">5</a> <a href="#">6</a>	mg	1.627	--	0.114	0.96	2.73	3.0	1.264	1.989	4	Analytical or derived from analytical	--	06/2008
Manganese, Mn <a href="#">1</a> <a href="#">3</a> <a href="#">5</a> <a href="#">6</a>	mg	6.707	--	0.320	5.87	7.8	3.0	5.689	7.725	4	Analytical or derived from analytical	--	06/2008
Selenium, Se <a href="#">1</a>	µg	13.5	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
<b>Vitamins</b>													
Vitamin C, total ascorbic acid <a href="#">1</a> <a href="#">2</a>	mg	1.0	--	--	0.7	1.3	1.0	--	--	2	Aggregated data involving comb. of codes other than 1,12 or6	--	07/2008
Thiamin <a href="#">1</a>	mg	0.854	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Riboflavin <a href="#">1</a>	mg	0.100	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Niacin <a href="#">1</a>	mg	0.896	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Pantothenic acid <a href="#">1</a>	mg	0.324	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Vitamin B-6 <a href="#">1</a> <a href="#">7</a>	mg	0.247	--	0.123	0.12	0.37	1.0	-1.316	1.81	2	Analytical or derived from analytical	--	06/2008

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Folate, total <sup>1</sup>	µg	82	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Folic acid	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	82	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Folate, DFE	µg	82	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Choline, total <sup>1</sup>	mg	8.8	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	12/2006
Betaine <sup>1</sup>	mg	0.9	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	12/2006
Vitamin B-12	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	01/1977
Vitamin B-12, added	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta <sup>1</sup>	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Carotene, alpha <sup>1</sup>	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Cryptoxanthin, beta <sup>1</sup>	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Vitamin A, IU	IU	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Lycopene <sup>1</sup>	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Lutein + zeaxanthin <sup>1</sup>	µg	0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Vitamin E (alpha-tocopherol) <sup>1,3</sup>	mg	1.77	--	0.473	0.98	2.24	1.0	-4.241	7.775	2	Analytical or derived from analytical	--	06/2008
Vitamin E, added	mg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Tocopherol, beta <sup>1,3</sup>	mg	8.30	--	8.304	0	23.16	1.0	-97.203	113.81	2	Analytical or derived from analytical	--	06/2008
Tocopherol, gamma <sup>1</sup>	mg	8.82	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	06/2008
Tocopherol, delta <sup>1,3</sup>	mg	0.23	--	0.177	0.05	0.63	1.0	-2.024	2.478	2	Analytical or derived from analytical	--	06/2008
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone) <sup>1</sup>	µg	0.0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
<b>Lipids</b>													
Fatty acids, total saturated	g	4.517	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
4:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
6:0 <sup>1</sup>	g	0.037	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
8:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
10:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
12:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
13:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
14:0 <sup>1</sup>	g	0.077	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
15:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
16:0 <sup>1</sup>	g	3.581	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
17:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:0 <sup>1</sup>	g	0.782	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
20:0 <sup>1</sup>	g	0.039	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
22:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
24:0 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Fatty acids, total monounsaturated	g	5.982	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
14:1 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
15:1 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
16:1 undifferentiated <sup>1</sup>	g	0.039	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008

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17:1 <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:1 undifferentiated <sup>1</sup>	g	5.864	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:1 c <sup>1</sup>	g	5.864	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:1 t <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
20:1 <sup>1</sup>	g	0.078	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
22:1 undifferentiated <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
24:1 c <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Fatty acids, total polyunsaturated	g	28.569	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
18:2 undifferentiated <sup>1</sup>	g	28.295	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:3 undifferentiated <sup>1</sup>	g	0.273	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:3 n-3 c,c,c (ALA) <sup>1</sup>	g	0.273	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:3 n-6 c,c,c <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
18:4	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
20:2 n-6 c,c <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
20:3 undifferentiated <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
20:4 undifferentiated <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
20:5 n-3 (EPA) <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
22:5 n-3 (DPA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
22:6 n-3 (DHA) <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Fatty acids, total trans-monoenoic	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	07/2008
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/1977
Stigmasterol <sup>1</sup>	mg	7	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	05/2011
Campesterol <sup>1</sup>	mg	29	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	05/2011
Beta-sitosterol <sup>1</sup>	mg	109	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	05/2011
<b>Amino Acids</b>													
Tryptophan <sup>1</sup>	g	0.184	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008

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Threonine <a href="#">1</a>	g	0.686	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Isoleucine <a href="#">1</a>	g	0.819	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Leucine <a href="#">1</a>	g	1.321	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Lysine <a href="#">1</a>	g	0.952	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Methionine <a href="#">1</a>	g	0.502	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Cystine <a href="#">1</a>	g	0.297	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Phenylalanine <a href="#">1</a>	g	0.758	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Tyrosine <a href="#">1</a>	g	0.727	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Valine <a href="#">1</a>	g	1.095	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Arginine <a href="#">1</a>	g	1.945	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Histidine <a href="#">1</a>	g	0.471	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Alanine <a href="#">1</a>	g	0.839	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Aspartic acid <a href="#">1</a>	g	2.365	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008
Glutamic acid <a href="#">1</a>	g	4.299	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other than 1,12 or 6	--	06/2008

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Glycine <sup>1</sup>	g	0.952	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Proline <sup>1</sup>	g	2.754	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Serine <sup>1</sup>	g	0.952	--	--	--	--	--	--	--	--	Aggregated data involving comb. of codes other then 1,12 or6	--	06/2008
Hydroxyproline <sup>1</sup>	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	07/2008
<b>Other</b>													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	12/1987
Caffeine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2003
Theobromine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2003

#### Sources of Data

<sup>1</sup>Nutrient Data Laboratory, ARS, USDA National Food and Nutrient Analysis Program Wave 6h, 2002 Beltsville MD

<sup>2</sup>McCormick & Company, Inc. Nutrient Analysis Reports for McCormick Spices and Herbs, 1993 MD

<sup>3</sup>M. Ozcan, C. Atalay Determination of seed and oil properties of some poppy (*Papaver somniferum L.*) varieties, 2006 Grasas Y Aceites 57 2 pp.169-174

<sup>4</sup>Dawn Food Products Dawn Food Products, Fiber Analysis, 1990

<sup>5</sup>M. Ozcan Determination of the mineral compositions of some selected oil-bearing seeds & kernels using Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), 2006 Grasas y Aceites 57 2

<sup>6</sup>M. Soylak, M. Tuzen, I. Narin, H. Sari Comparison of microwave, dry and wet digestion procedures for the determination of trace metal contents in spice samples produced in Turkey, 2004 Journal of Food and Drug Analysis 12 3 pp.254-258

<sup>7</sup>S.W. Leonard, K. Hardin, J.E. Leklem Vitamin B-6 Content of Spices, 2001 Journal of Food Composition and Analysis 14 pp.163-167

<sup>8</sup>Gu, L., Kelm, M.A., Hammerstone, J.F., Beecher, G., Holden, J., Haytowitz, D., Gebhardt, S., and Prior, R.L. Concentrations of proanthocyanidins in common foods and estimations of normal consumption., 2004 J. Nutr. 134 pp.613-617

#### Footnotes

<sup>a</sup> Other phytosterols = 38.4 mg/100g; these include delta 5-avenasterol (17.7), campestanol (2.6), and other minor phytosterols (18.1 mg).